

IN THE SPECIFICATION:

Please amend paragraph [0004] as follows:

[0004] As the size of the features of a semiconductor device continues to decrease with each generation, ever greater precision is required in order to apply viscous material to the surface thereof. This includes the application of solder paste to the surface of a printed circuit board or die for securing a flip chip thereto. Metal stencils are currently utilized to apply the solder paste onto the surface for connecting the contact pads of surface mounted flip chips. These stencils typically have a plurality of ~~apertures that are~~ apertures, each formed in the stencil in predetermined locations that correspond to the pattern of the contact pads on the printed circuit board of choice.

Please amend paragraph [0026] as follows:

[0026] In FIG. 2, once the stencil 12 is placed upon substrate 14 of a semiconductor device, a material 26 is applied across the top surface of stencil 12 via a wiper 24. The material 26 extrudes through the first portion of aperture 16 being constrained by first wall 18 and further extrudes through the second portion of the aperture 16, not contacting the second wall 20 thereof. As illustrated, material 26 contacts surface 22 (FIG. 1) of substrate 14, having an area substantially the same shape as formed by first wall 18. The extruded material 26 only contacts the first wall 18 of the aperture 16 of the stencil in a small area adjacent the top or upper end of the first portion formed by first wall 18 of aperture 16. Illustrated in FIG. 3 is the extruded material remaining on the substrate 14 as material element 28.

Please amend paragraph [0029] as follows:

[0029] The apertures 16 formed by walls 18 and 20 may have any desired overall shape or each portion may have any desired shape, such as square, circular, oval, rectangular, other polygonal shapes or combinations thereof. The aperture 16 and the portions thereof formed by walls 18 and 20 each have a nominal diameter. The height or thickness of the material element 28 is typically greater than the nominal diameter thereof, but can also be substantially

the same height and nominal diameter. The ratio of vertical height to the nominal diameter of the material element 28 at the base thereof ranges from 0.1 to 10. This range translates ~~to from~~ from 0.001" to 0.050" in height and from 0.0011" to 0.5" in diameter. The thickness of the stencil 12 ranges from 0.1 to 10 times the nominal diameter of the aperture 16 adjacent the top surface of the stencil 12 in forming material element 28. This range of height to nominal diameter ratios is achievable only because of the ability to extrude or apply the material as disclosed and illustrated herein, rather than as done in the prior art methods using other stencils. What limits the ratio of the element height versus the diameter at the base of the material element 28 is the viscosity of the material 26, as well as its thixotropic index. Thixotropic, highly viscous materials are used that have a viscosity typically ranging from 30K to 310K centipoise with approximately 70K centipoise being preferred. The thixotropic index typically ranges from 1.7-3.2, with approximately 2.5 being preferred.